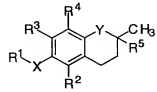
AMENDMENTS TO THE CLAIMS

Claim 1 (currently amended): A method for ~~the treatment of a cell proliferative disease~~ inhibiting the growth of tumor cells in an individual comprising administering to ~~an~~ the individual a pharmacologically effective dose of a compound having a structural formula



wherein X is oxygen or nitrogen;

Y is oxygen or NR^6

R^1 is $-C_{1-10}$alkylene-COOH, $-C_{1-4}$alkylene-$CONH_2$, $-C_{1-4}$alkylene-COO-C_{1-4}alkyl, $-C_{1-4}$alkylene-$CON(C_{1-4}$alkylene-$COOH)_2$, $-C_{1-4}$alkylene-OH, $-C_{1-4}$alkylene-NH_3-halo or $-C_{1-4}$alkylene-$OSO_2NH(C_{1-4}$alkyl), $-C_{1-4}$alkylene-COO-C_{1-4}alkyl, $-C_{1-10}$alkylene-CO-SH, $-C_{1-4}$alkylene-CO-$S(C_{1-4}$alkyl), $-C_{1-4}$alkylene-CS-NH_2, $-C_{1-4}$alkylene-CO-$NH_{(2-n)}(C_{1-4}$alkyl)$_n$ wherein n is 2 or 1, $-C_{1-4}$alkylene-SO_2-O(C_{1-4}alkyl), -C_{1-4}alkylene-OSO_2-O(C_{1-4}alkyl), $-C_{1-4}$alkylene-OP(O-C_{1-4}alkyl)$_3$, or $-C_{1-10}$alkylene-CN;

R^2 and R^3 are independently hydrogen or R^4 when R^7 is -XR^1; or

R^2 and R^3 are hydrogen or R^2 and R^3 are R^4 or R^2 is hydrogen and R^3 is R^4 when R^7 is hydroxyl;

R^4 is methyl;

R^5 is a $C_{7\text{-}16}$ olefinic group containing 3 to 5 ethylenic bonds;

R^6 is hydrogen or methyl; and

R^7 is hydroxyl or -XR^1; or a pharmaceutical composition thereof.

Claim 2 (original): The method of claim 1, wherein said compound is α-tocotrienol, γ-tocotrienol or δ-tocotrienol.

Claim 3 (original): The method of claim 1, wherein said compound is 2,5,7,8-tetramethyl-2R-(4,8,12-trimethyl-3,7,11 E:Z tridecatrien) chroman-6-yloxy) acetic acid.

Claim 4 (currently amended): The method of claim 1, wherein said compound ~~exhibits an anti-proliferative effect~~

~~comprising~~ induces apoptosis, DNA synthesis arrest, cell cycle arrest, or cellular differentiation in cells comprising said tumor.

Claim 5 (currently amended): The method of claim 1, wherein said compound is administered in a dose of ~~from~~ about 1 mg/kg to about 60 mg/kg.

Claim 6 (currently amended): The method of claim 5, wherein administration of said composition is ~~selected from the group consisting of~~ oral, topical, liposomal/aerosol, intraocular, intranasal, parenteral, intravenous, intramuscular, or subcutaneous.

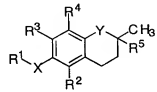
Claim 7 (canceled).

Claim 8 (currently amended): The method of claim 1 [[7]], wherein said ~~neoplastic disease is selected from the group consisting of~~ tumor cells comprise an ovarian cancer, a cervical cancer, an endometrial cancer, a bladder cancer, a lung cancer, a breast cancer, a testicular cancer, a prostate cancer, a glioma[[s]], a fibrosarcoma[[s]], a retinoblastoma[[s]], a melanoma[[s]], a soft tissue sarcoma[[s]], an ostersarcoma[[s]], a leukemia[[s]], a colon

cancer, a carcinoma of the kidney, a pancreatic cancer, a basal cell carcinoma, ~~and~~ or a squamous cell carcinoma.

Claims 9-13 (canceled).

Claim 14 (original): A method of inducing apoptosis of a cell, comprising the step of contacting said cell with a pharmacologically effective dose of the compound having a structural formula



wherein X is oxygen or nitrogen;

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R^1 is $-C_{1-10}$alkylene-COOH, $-C_{1-4}$alkylene-$CONH_2$, $-C_{1-4}$alkylene-COO-C_{1-4}alkyl, $-C_{1-4}$alkylene-CON(C_{1-4}alkylene-COOH)$_2$, $-C_{1-4}$alkylene-OH, $-C_{1-4}$alkylene-NH_3-halo or $-C_{1-4}$alkylene-$OSO_2NH(C_{1-4}$alkyl), $-C_{1-4}$alkylene-COO-C_{1-4}alkyl, $-C_{1-10}$alkylene-CO-SH, $-C_{1-4}$alkylene-CO-S(C_{1-4}alkyl), $-C_{1-4}$alkylene-CS-NH_2, $-C_{1-4}$alkylene-CO-$NH_{(2-n)}(C_{1-4}$alkyl)$_n$ wherein n is 2 or 1, $-C_{1-4}$alkylene-SO_2-O(C_{1-4}alkyl), -

C_{1-4}alkylene-OSO_2-O(C_{1-4}alkyl), -C_{1-4}alkylene-OP(O-C_{1-4}alkyl)$_3$, or -C_{1-10}alkylene-CN;

R^2 and R^3 are independently hydrogen or R^4 when R^7 is -XR^1; or

R^2 and R^3 are hydrogen or R^2 and R^3 are R^4 or R^2 is hydrogen and R^3 is R^4 when R^7 is hydroxyl;

R^4 is methyl;

R^5 is a C_{7-16} olefinic group containing 3 to 5 ethylenic bonds;

R^6 is hydrogen or methyl; and

R^7 is hydroxyl or -XR^1; or a pharmaceutical composition thereof.

Claim 15 (original): The method of claim 14, wherein said compound is α- tocotrienol, γ-tocotrienol or δ-tocotrienol.

Claim 16 (original): The method of claim 14, wherein said compound is 2,5,7,8-tetramethyl-2R-(4,8,12-trimethyl-3,7,11 E:Z tridecatrien) chroman-6-yloxy) acetic acid.

Claim 17 (canceled).